

SNC Reference Number  
(enter if previously assigned)

**0800085**

## PROJECT SUMMARY

**County: Plumas**

**Applicant: Quincy Community Services District**

**Project Title: Solar Powered Ultraviolet Disinfection**

### PROJECT GOAL

The goal of this project is to eliminate, using an ultraviolet disinfection system and solar power, toxic discharge from the Quincy Community Services District Wastewater Treatment Plant to enhance the current Proposition 50 funded wastewater treatment wetlands, which will be built in 2009. The goal would be to eliminate the use of 152 tons of liquid chlorine bleach and liquid sodium bisulfite, which correlates to improving water quality for 300 million gallons of wastewater at the plant each year. The Solar project correlates to removing 25 tons of carbon dioxide emissions each year by using 12 Kw of Solar Power.

### PROJECT SCOPE

This is an infrastructure project. The scope of work is limited to a retrofitting of the current chlorine contact basin in order to use it as an ultraviolet light disinfection system and run the ultraviolet light with solar power. Three modular, prefabricated, ultraviolet units will be inserted into the current chlorine contact basin. The 12 Kw Solar panels will be installed at the plant and connected to the electrical grid. SNC grant money would be used to pay for the ultraviolet units, the electrical wiring, solar panels and their installation. The outcome of this project should be a chlorine free discharge which enhances 35 acres of new "wetlands" treatment.

### LETTERS OF SUPPORT

### SNC PROJECT DELIVERABLES AND SCHEDULE

DETAILED PROJECT DELIVERABLES	TIMELINE
INCLUDE SPECIFIC TASKS IDENTIFIED IN SCOPE AND ALL REPORTS, ETC. This schedule is based on SNC grant approval by January 1 <sup>st</sup> 2009	ASSUME START DATE 60 DAYS AFTER SNC BOARD AUTHORIZATION
Retrofitting plans & specifications completed	November 2008

Retrofitting construction, ultraviolet system into existing basin	July 2009
Solar panels (12 Kw) installation and grid inter-tie	August 2009
<b>Monitoring starts</b>	<b>September 2009</b>
<b>Initial Report</b>	<b>December 2009</b>

**SNC PROJECT COSTS**

<b>PROJECT BUDGET CATEGORIES</b>	<b>TOTAL SNC FUNDING</b>
I	\$
Ultraviolet Disinfection System	\$153,200
Installation of UV system into existing chlorine basin	\$100,000
Solar panels and grid inter-tie(12 Kw system)	\$220,000
	\$
Administration and Contingency	\$ 25,000
Monitoring, data collection, and analysis	\$ 1,800
	\$
	\$
	\$
<b>SNC GRANT TOTAL</b>	<b>\$500,000</b>